

**CLAIMS**

1. A double stranded oligoribonucleotide wherein one strand comprises consecutive nucleotides having, from 5' to 3', the sequence set forth in SEQ ID NOS: 3-24 or a homolog thereof wherein in up to 2 of the nucleotides in each terminal region a base is altered.  
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2. A double stranded oligoribonucleotide wherein one strand comprises consecutive nucleotides having, from 5' to 3', the sequence set forth in SEQ ID NOS:25-45 or a homolog thereof wherein in up to 2 of the nucleotides in each terminal region a base is altered.  
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3. An oligonucleotide which comprises consecutive nucleotides having, from 5' to 3', the sequence set forth in SEQ ID NOS:46-66 or a homolog thereof.
4. A vector comprising an oligoribonucleotide of claim 1 or 2 or an oligonucleotide of claim 3.
- 15 5. A pharmaceutical composition comprising an oligoribonucleotide of claim 1 or 2, an oligonucleotide of claim 3 or a vector of claim 4.
6. A method of treating a neurodegenerative disease in a subject which comprises administering to the subject a therapeutically effective amount of a pharmaceutical composition comprising a BMP2A inhibitor so as to thereby treat the subject.
- 20 7. The method of claim 6 wherein the pharmaceutical compositions comprises an oligoribonucleotide or oligonucleotide which down regulates the expression of gene BMP2A by at least 50% as compared to a control.
8. The method of claim 6 wherein the BMP2A inhibitor is an antisense oligonucleotide.
9. The method of claim 8 wherein the antisense oligonucleotide is an oligonucleotide of claim 3.  
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10. The method of claim 6 wherein the BMP2A inhibitor is a BMP2A siRNA.
11. The method of claim 10 wherein the siRNA is an oligoribonucleotide of claim 1.

12. The method of claim 10 wherein the siRNA is an oligoribonucleotide of claim 2.
13. The method of claim 10 wherein the siRNA has a sequence selected from the group set forth in Table 1, ID numbers 1-2, 4-6, 14-16 and 18-22.
14. The method of any one of claims 6-13 wherein the disease is a stroke.
- 5 15. Use of a BMP2A inhibitor in the preparation of a medicament.
16. Use of a BMP2A inhibitor in the preparation of a medicament for the treatment of a neurodegenerative disease.
17. The use of claim 15 or 16 wherein the BMP2A inhibitor is an antisense oligonucleotide.
18. The use of claim 17 wherein the antisense oligonucleotide is an oligonucleotide of claim 3.
- 10 19. The use of claim 15 or 16 wherein the BMP2A inhibitor is a BMP2A siRNA.
20. The use of claim 19 wherein the siRNA is an oligoribonucleotide of claim 1.
21. The use of claim 19 wherein the siRNA is an oligoribonucleotide of claim 2.
22. An oligonucleotide comprising consecutive nucleotides the sequence of which is set forth in SEQ ID NOS:46-66.
- 15 23. An oligonucleotide comprising consecutive nucleotides the sequence of which is set forth in SEQ ID NOS:3-45.
24. A vector comprising an oligonucleotide of claim 22 or 23.
25. A pharmaceutical composition comprising an oligonucleotide of claim 22 or 23 or a vector of claim 24 and a pharmaceutically acceptable carrier.